

What Is Claimed Is:

1. A device for determining at least one parameter of a medium flowing in a line (3) in a main flow direction (18), in particular the mass of intake air for an internal combustion engine, having a part (6) that is capable of being introduced into the line (3) with a predetermined orientation relative to the main flow direction (18) in such a manner that a partial stream of the medium flowing through the line (3) flows through at least one measuring channel (40) provided in the part (6) in a measuring channel flow direction (a) from an inlet (41) of the measuring channel to an outlet (49) of the measuring channel, and having at least one measuring element (9) that is located in the measuring channel (40) for determining the at least one parameter, the measuring channel (40) including, between the inlet (41) and the measuring element (9), a bent section (42) for redirecting the partial stream that entered the measuring channel through the inlet (41), the bent section transitioning into a further section (44) of the measuring channel (40) in which the measuring element is located, wherein means (50) that project into the measuring channel are located downstream from the inlet (41) and upstream from the measuring element (9), as viewed in the measuring channel flow direction (a), the means directing the flow and counteracting a separation of the flow of the partial stream of medium from the channel walls (43) of the measuring channel.

2. The device as recited in Claim 1, wherein the means include at least one single-component, continuous partition (50) or an interrupted, double-component partition (50) that is located in the measuring channel (40) transversely to the measuring channel flow direction (a).

3. The device as recited in Claim 1 or 2, wherein the means (50) are located in the transitional region from the bent section (42) to the further section (44), as viewed in the measuring channel flow direction (a).

4. The device as recited in Claim 2, wherein the at least one single-component, continuous partition (50) or interrupted, double-component partition (50) is attached with two end sections (55a, 55b) that face away from each other to diametrically opposed wall sections (45a, 45b) of the interior wall of the measuring channel in such a manner that a line that connects the two end sections (55a, 55b) of the partition extends nearly perpendicularly to the measuring channel flow direction (a).

5. The device as recited in Claim 2, wherein the at least one partition (50) includes the end sections (55a, 55b) and also a front side (53) that faces the measuring channel flow direction (a), a back side (54) that faces away from this flow direction, and two flow guide surfaces (51, 52) extending essentially parallel to the measuring channel flow direction.

6. The device as recited in Claim 2, wherein the surfaces of the partition (50) that are exposed to the flow have a guide vane geometry or guide blade geometry.

7. The device as recited in one of Claims 2 through 6, wherein the at least one partition (50) includes two partial wall sections (50a, 50b) that project toward each other from diametrically opposed interior wall sections (45a, 45b) of the measuring channel (40).

8. The device as recited in Claim 7, wherein the partial wall sections (50a, 50b) are separated by a gap (59).

9. The device as recited in Claim 5, wherein the front side (53) of the partition (50) is oriented perpendicularly to the measuring channel flow direction (a).

10. The device as recited in Claim 5, wherein the back side (54) of the partition (50) extends, relative to the measuring channel flow direction (a), at an angle that is less than ninety degrees and greater than zero degrees.

11. The device as recited in Claim 7, wherein the back sides (54a, 54b) of the partial wall sections (50a, 50b), as viewed in cross section, form an angle (α) with the measuring channel flow direction (a) that is less than ninety degrees and greater than zero degrees, and is preferably less than 70 degrees and greater than thirty degrees. (Figure 2)